REMARKS

I.   Introduction

In response to the Office Action dated March 5, 2003, the claims have not been amended. Claims 1-4, 6-12, 14-20, and 22-24 remain in the application. Re-examination and re-consideration of the application is requested.

II.   Information Disclosure Statement

On March 15, 2002, a supplemental Information Disclosure Statement (IDS) was filed (copy enclosed). Acknowledgement of receipt of the supplemental IDS was received in the form of a post card stamped by the OIPE on March 21, 2002 (copy enclosed).

However, the supplemental IDS has not been acknowledged by the Examiner. Accordingly, Applicants respectfully request acknowledgement and consideration of the timely filed IDS and indication of such consideration by duly noting/initialing the Form 1449.

III.   Prior Art Rejections

In paragraphs (2)-(3) of the Office Action, claims 1, 4, 7, 9, 12, 15, 17, 20, and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Menon et al., U.S. Patent No. 5,574,882 (Menon) in view of Abe, U.S. Patent No. 5,450,600 (Abe). In paragraphs (4)-(5) of the Office Action, claims 6, 14, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Menon in view of Abe as applied to claims 1, 9, and 17 and further in view of IBM Technical Disclosure Bulletin "Limited Distributed DASD Checksum" (IBM). In paragraph (6) of the Office Action, claims 8, 16, and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Menon in view of Abe as applied to claims 1, 9, and 17, and further in view of Lyons, U.S. Patent No. 6,101,615 (Lyons). In paragraph (7) of the Office Action, claims 2-3, 10-11, and 18-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Menon in view of Abe as applied to claims 1, 9, and 17 and further in view of Ofer, U.S. Patent No. 5,892,955 (Ofer).

Independent claims 1, 9, and 17 are generally directed to updating parity data in a RAID clustered environment. Specifically, parity is locked, read, and new parity data is generated. The new parity data is written and then unlocked. Further, the commands for writing and unlocking the parity (in the RAID environment) are combined into a single command. The combining of these

-7-

G&C 30879.80-US-01

commands into a single command provides for less overhead than other methods for any number of nodes in a cluster. Thus, by combining such RAID commands, the number of commands sent are reduced. The prior art fails to provide such a mechanism.

Menon merely describes a system and method that is used by software implemented Redundancy Array of Inexpensive Disk (RAID) arrays to achieve adequate performance and reliability, as well as to improve performance or low cost hardware Raids. However, as stated in the Office Action, Menon fails to provide for combining the commands for writing and unlocking into a single command. To teach this claim element, the Office Action relies on Abe col. 5, line 22 – col. 6 line 11; and col. 17, lines 49-50).

Abe merely describes an integrated command definition file defining both names of integrated commands and basic commands integrated. A basic command syntax file stores the basic commands and the parameter information. An integrated command registration utility has functions to convert the integrated command definition to an integrated command syntax file. An interactive command management module recognizes both the basic commands memorized in the basic command syntax file and integrated commands memorized in the integrated command syntax file.

However, Abe completely fails to teach, describe, or suggest: (1) a RAID clustered system; (2) a SCSI disk in a RAID system; (3) parity; (4) writing and unlocking parity data; and (5) combining a writing command and an unlocking command. In fact, separate electronic searches for the terms "RAID", "SCSI", "parity", "writ", "lock", and "combin" all came up with no results. Without even mentioning these vital claimed terms, Abe cannot possibly teach the invention (or the suggested element) as claimed. In this regard, Abe merely describes an "integrated command" that integrates a plurality of basic commands for drawing graphics in a graphic processing system (see col. 1, lines 9-10, and col. 5, line 22 – col. 6, line 11). Thus, Abe specifically relates to integrating graphics commands (and not parity as claimed) in a graphics processing system. The claims specifically provide for combining a parity writing and parity unlocking command into a single command. There is no suggestion, implicit or explicit, for such an integrated or combined command.

Applicants also submit that there is no suggestion to use Abe's teachings in a RAID clustered environment or to update parity data. Further, there is no suggestion/motivation to combine Menon with Abe. The Office Action provides that the motivation to combine Menon and Abe is based on recognizing Abe's benefits for the desirable purpose of simplification. The MPEP

-8-

§2141.01(a) provides "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned" (In re Oetiker, 977 F.2d 1443, 1446 (Fed. Cir. 1992). Additionally, in accordance with MPEP §2143, there must be a motivation to combine the references. In this regard, MPEP §2143.01 provides that there must be some teaching, suggestion, or motivation to combine either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.

In the cited references, Menon's field of invention relates to data storage systems and a method for storing data in a software or low cost hardware implemented storage array system (see col. 1, lines 7-10). However, Abe's field of invention relates to a command operation for drawing graphics by a graphic processing system (see col. 1, lines 9-10). Such clearly unrelated fields are not even remotely similar. In this regard, a graphics programmer is not likely to consider and look to data storage systems and RAID environments (see col. 1, line 14 - col. 2, lines 44) for any solutions. Further, there is no suggestion to combine such references or fields of art, either implicitly or explicitly within the references. The knowledge generally available to one of ordinary skill in the art also fails to provide such a motivation. The Office Action relies on the motivation being a desirable purpose of simplification. The mere concept of a desire to simplify does not even remotely acknowledge the problem Menon (or the present invention) addresses. Also, such a concept fails to provide a motivation to combine the references.

Even when combined, the references teach away from Applicants' invention. For example, the combination of Menon with Abe would teach combining drawing commands in accordance with Abe and then storing the drawings in a RAID environment with appropriate parity. However, the concept of combining a write and unlock parity command as claimed is not even remotely suggested by the references, either separately, or in combination.

Moreover, the various elements of Applicants' claimed invention together provide operational advantages over Menon, Abe, IBM, Lyons, and Ofer. In addition, Applicants' invention solves problems not recognized by Menon, Abe, IBM, Lyons, and Ofer.

-9-

G&C 30879.80-US-01

Thus, Applicants submit that independent claims 1, 9, and 17 are allowable over Menon, Abe, IBM, Lyons, and Ofer. Further, dependent claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24 are submitted to be allowable over Menon, Abe, IBM, Lyons, and Ofer in the same manner, because they are dependent on independent claims 1, 9, and 17, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24 recite additional novel elements not shown by Menon, Abe, IBM, Lyons, and Ofer.

IV. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

GATES & COOPER LLP
Attorneys for Applicant(s)

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: June 2, 2003

By:
Name: George H. Gates
Reg. No.: 33,500

GHG/JSF/mrj

-10-

G&C 30879.80-US-01

#9

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Lawrence Yium-chee Chiu et al.	Examiner:	~~Not yet assigned~~ McLean-Mayo, K.
Serial No.:	09/755,858	Group Art Unit:	~~2186~~ 2187
Filed:	January 5, 2001	Docket:	ARC920000054US1
Title:	METHOD AND APPARATUS FOR SUPPORTING PARITY PROTECTED RAID IN A CLUSTERED ENVIRONMENT		

CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class
mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on March 15, 2002.

By: _____

Name: George H. Gates

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (37 C.F.R. §1.97(b))

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

With regard to the above-identified application, the items of information listed on the

enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted before the mailing date of

a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on

the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(a)(2), a copy of each document or other

information listed on the enclosed Form 1449 is provided.

No representation is made that a reference is "prior art" within the meaning of 35

U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to

establish that the reference(s) are not "prior art". Moreover, Applicants do not represent that a

reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

<div align="center">1</div>

G&C 30879.80-US-01

COPY

Consideration of the items listed is respectfully requested. Pursuant to the provisions

of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as

being considered and initialed by the Examiner, to the undersigned with the next official

communication.

Please direct any response or inquiry to the below-signed attorney at (310) 641-8797.

Respectfully submitted,

GATES & COOPER LLP
Attorneys for Applicant(s)

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: <u>March 15, 2002</u>

By: _____
George H. Gates
Reg. No.: 33,500

GHG/sjm

2   G&C 30879.80-US-01

COPY